Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1. (Currently Amended) An information processing apparatus including,

a processing device for performing predetermined processing of information, and

a bus for interconnecting said processing device and other component devices of said information processing apparatus,

wherein said processing device is integrated on a single semiconductor chip, internally generates key information, ~~and~~ internally encrypts sensitive information ~~encrypted~~inputted from said bus with said generated key information, and outputs said encrypted sensitive information to said bus without outputting said key information used for encrypting said sensitive information to said bus,

wherein said processing device newly generates key information each time sensitive information inputted from said bus is encrypted, and

wherein said processing device deletes said key information in said single semiconductor chip if an abnormality is detected.

2. (Previously Presented) An information processing apparatus as claimed in claim 1,

wherein said processing device comprises an external bus controller for

preventing non-encrypted sensitive information from being output onto said bus.

3. (Original) An information processing apparatus as claimed in claim 2;

wherein information not requiring encryption is output onto said bus through said external bus controller.

4. (Previously Presented) An information processing apparatus as claimed in claim 1,

wherein a memory device is provided for storing information encrypted by said processing device.

5. (Previously Presented) An information processing apparatus as claimed in claim 1,

wherein said processing device comprises means for decrypting encrypted information at an information write operation.

6. (Original) An information processing apparatus as claimed in claim 5,

wherein said information processing apparatus is connected to a different information processing apparatus through a network, and

wherein said information processing apparatus decrypts encrypted information which is received from said different information processing apparatus.

7. (Original) An information processing apparatus as claimed in claim 1,

wherein a plurality of said processing devices are provided, and cryptographic processing is carried out in each of said processing devices.

8. (Original) An information processing apparatus as claimed in claim 1,

wherein said processing device comprises means for receiving an encrypted program and for carrying out decryption thereof.

9. (Previously Presented) An information processing apparatus as claimed in claim 1

wherein said processing device comprises:

a microprocessor for carrying out said predetermined processing;

a generator for generating said key information;

a cryptographic algorithm memory device for storing an algorithm for information cryptographic processing;

a volatile memory device for storing said generated key information;

a cryptographic processing device for carrying out cryptographic processing with said stored key information according to said algorithm; and

a microprocessor bus for interconnecting said microprocessor, said generator, said cryptographic processing algorithm memory device, said volatile memory device and said cryptographic processing device, and

wherein a power supply to said volatile memory is stopped so as to delete

said key information in said single semiconductor chip if said abnormality is detected.

10. (Currently Amended) A disk system controller, including a processing device for carrying out information processing to control a magnetic disk for storing encrypted information,

wherein said disk system controller, upon receipt of a request for reading out said encrypted information from host system, ~~internally generates key information in a single semiconductor chip on which said processing device is integrated,~~ reads out encrypted file location information indicating a location of information stored on said magnetic disk from said magnetic disk, internally decrypts said encrypted file location information thus read out in said single semiconductor chip on which said prospecting device is integrated, according to the decrypted file location information, reads out said encrypted information from said magnetic disk,

wherein said disk system controller, writes encrypted information into said magnetic disk, updates file location information, internally generates key information in said single semiconductor chip, internally encrypts said updated file location information in said single semiconductor chip, and writes said encrypted location information into said magnetic disk without outputting said key information used for encrypting said location information from said single semiconductor chip,

wherein said disk system controller newly generates key information each time file location information is encrypted, and

wherein said disk system controller deletes said key information in said single

semiconductor chip if an abnormality is detected.

11. (Original) A disk system controller as claimed in claim 10,

wherein said disk controller is connected to a plurality of magnetic disks.

12. (Original) A disk system controller as claimed in claim 10,

wherein said disk system controller is connected to an information processing apparatus, and

wherein said disk system controller reads out said encrypted information from said magnetic disk upon receipt of a request therefrom.

13. (Canceled)

14. (Previously Presented) An information processing apparatus as claimed in claim 1,

wherein said abnormality is a disassembly or removal of a case or housing of said processing device.

15. (Previously Presented) An information processing apparatus as claimed in claim 1,

wherein said key information is a random number, and

wherein said generator generates said random number based on a signal outputted from a constant voltage diode.